Pearson, Scott Foresman-Addison Wesley enVisionMATH, Grades 3-5

Degree of Evidence regarding the Standards for Mathematical Practice:

Limited Evidence

Summary of evidence:

- 1. Make sense of problems and persevere in solving them. There is moderate evidence for this practice throughout the series. Multiple approaches, multiple representations, and opportunities for students to analyze and explain questions were found throughout this grade span. For example, the Grade 4 multiplication units incorporate repeated addition, arrays, hundred charts, grid paper and skip counting in problem solving. Reviewers cited opportunities of students considering reasonableness, and students are encouraged to rethink and defend their responses. Overall, this practice is well developed throughout this series.
- 2. **Reason Abstractly and Quantitatively**. There is limited evidence to support this practice throughout this grade span. This resource uses algorithm step-by-step problem types and lacks opportunities for students to apply the notion of properties except with the standard algorithm. Considering and justifying reasonableness was found to be well developed in Grade 5, but reviewers found it to be poorly developed in Grades 3 and 4. In the Grade 5 materials reviewers cited evidence of students often being asked to explain the meaning of an operation before they find a solution, and in Grade 5 students are given opportunities to explain and check for reasonableness. Reviewers found no evidence for students considering or checking for reasonableness in the Grades 3 and 4 samples.
- 3. Construct viable arguments and critique the reasoning of others. There is limited evidence to support this practice. In the Grade 5 opening activities, evidence was cited of many opportunities for students to justify their answers and reason about their conclusions. In Grades 3, 4 and 5 there was little to no evidence found to support the notion of students to hear, explain, or critique others. Little to no evidence was found of non-examples throughout this series.
- 4. **Model with mathematics.** Evidence for this practice is inconsistent across the grade levels. Reviewers for Grades 3 and 4 found this practice to be especially weak and poorly developed. Reviewers for Grade 5 found this practice to be well developed but cited that models are used as examples for explaining purposes only. Concrete models are not used during guided practice.
- 5. Use appropriate tools strategically. There is limited evidence for this practice. Reviewers cited evidence of a variety of tools being used by students. This resource allows students to become sufficiently familiar with tools appropriate for their grade and make sound decisions about tools that might be helpful. There was no evidence found for student understanding of the advantages or limitations of tools.
- 6. **Attend to precision.** There was limited evidence found to support development of this practice throughout the sampled materials. Communication involving precision was found to be limited, but students were encouraged to use precision and correct mathematical vocabulary when solving problems. Examples throughout the series model precision.
- 7. Look for and make use of structure. There was limited evidence of this practice throughout this series. In Grades 5 and 6, students are often asked how prior learning might help with the new topic of study, and this practice is well developed in these two grades. There is a lack of evidence to support this practice in Grades 3 and 4. In Grades 3 and 4, prior learning is only referenced in the spiral review.

8. Look for and express regularity in repeated reasoning. There is inconsistent evidence for this practice across the grade levels. Reviewers for Grade 6 found strong evidence for students using patterns to formulate generalities. Grade 5 students are encouraged to notice repetitiveness of general methods and are given opportunities to realize short cuts. In Grades 3 and 4 students are occasionally asked to notice the repetitiveness and apply the patterns to their work, but there is little or no evidence of students looking for reasonableness or finding short cuts.